DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015532 Address: 333 Burma Road **Date Inspected:** 07-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Gao Zhi Chun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower Components

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY#10

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #4A located on South tower Lift-5 SSD1 – TL5 – 1E/F. Welder is identified as 040581. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U5b.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 13. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 1A located on Lift-5 Splice Plate Stiffener NSD1 – SPSA5 – 13. Welder is identified as 050289. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

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Weld joint #3A located on Lift-5 Splice Plate Stiffener SSD1 – SPSA5 – 13. Welder is identified as 052493. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint #4B located on South tower Lift-5 SSD1 – TL5 – 1E/F. Welder is identified as 500363. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U5b. (See attached photo)

BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006148

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component designations reviewed are as follows: WEST TOWER, LIFT-4, STEP PLATE

WSD1 - FASA4 - 2C/E - 14; 15

WEST TOWER, LIFT-4, ANGLE PLATE OF SKIN B&C

WSD1 - FCSA4 - 2A/C - 77; 78; 79

WSD1 - FBSA4 - 2A/C - 48

Magnetic Particle Testing (MT)

This QA inspector performed MT of the area previously tested and accepted by ZPMC Quality Control personnel.

This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

WEST TOWER, LIFT-4, STEP PLATE – GREEN TAG#12713

WSD1 - FASA4 - 2C/E - 14; 15

WEST TOWER, LIFT-4, ANGLE PLATE OF SKIN B&C - GREEN TAG#12714

WSD1 - FCSA4 - 2A/C - 77; 78; 79

WSD1 - FBSA4 - 2A/C - 48

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006142

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

TOWER STRUT

ND1 – STSA4 – 6 – 127M – 2 – 5A/B; 9A/B; 10A/B; 73A/B – GREEN TAG#12711

ED1 – STSA4 – 6 – 139M – 2 – 5A/B; 9A/B; 10A/B; 73A/B – GREEN TAG#12712

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This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 7. Welder is identified as 046709. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint #45 located on Tower Strut SD1 – STSA4 – 5 – 135M – 1. Welder is identified as 041271. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2112.

Weld joint # 3A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 3A located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1. (See attached photo)

Weld joint # 1A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3211 - Tc - U5b - 1.

Weld joint # 26 located on Tower Strut WD1 – STSA4 – 5 – 119M – 1. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2112.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No Relevant Conversations.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer